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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,345

08/14/2008

Martin Bohn

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EXAMINER

PARVEZ, AZM A

ART UNIT

PAPER NUMBER

3729

NOTIFICATION DATE

DELIVERY MODE

03/26/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/588,345	Applicant(s) BOHN, MARTIN	
	Examiner AZM PARVEZ	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-52 is/are pending in the application.
- 4a) Of the above claim(s) 40,44 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-39,41-43 and 46-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 40,44-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/08/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species 3 of Fig 7 in the reply filed on 01/08/2010 is acknowledged.

Applicant also acknowledges that claims 37-43 and 49-50 read on the elected species and Claims 30 – 35, 37, 46-48, 51 and 52 are generic claims.

Claims 30-43 and 46-52 are pending.

Claim 40 is not supported by elected Fig 7 and will not be examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. DE 10 2004 006 457.1, filed on Feb 4, 2004.

This certified copy is not supported with **Fig 7** of elected species, so priority is considered to Application No. **PCT/EP2005/000951**, filed on Feb 1, 2005.

Claim Objections

3. Claims 39 and 48 are objected to because of the following informalities: In claim 39, line 3; "of" and in claim 48, line 2; "of" are not clearly understood. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 37 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 37 “a predetermined uniform antenna spacing that is substantially greater than the module spacing” is not supported in the specification of page 19; line 15-17. Appropriate correction is required.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “turned away from” in claims 49 and 50 is used by the claim to mean “other side”, while the accepted meaning is “turned the other way.” The term is indefinite because the specification does not clearly define the term.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Thomas Grasl et al., DE 10205914.

5. Regarding claim 30, Thomas Grasl et al. disclose;

A method of making an electronic component having a chip module (see Thomas Grasl et al. Fig 3; 4) with module contacts (see Thomas Grasl et al. Fig 3; 5) and an antenna (see Thomas Grasl et al. Fig 3; 2) having antenna contacts (see Thomas Grasl et al. Fig 3; 3), the method comprising the steps of:
securing the chip module (see Thomas Grasl et al. Fig 3; 4) and module contacts (see Thomas Grasl et al. Fig 3; 5) to the inner face of a module film (see Thomas Grasl et al. Fig 3; 6) having an outer periphery projecting past the chip module and module contacts;
securing the antenna (see Thomas Grasl et al. Fig 3; 2) and antenna contacts (see Thomas Grasl et al. Fig 3; 3) to a face of a support (see Thomas Grasl et al. Fig 3; 1a); pressing the module film against the support such that the module contacts (see Thomas Grasl et al. Fig 3; 5) engage and bear on the antenna contacts (see Thomas Grasl et al. Fig 3; 3); and bonding the outer periphery to the face of the support generally all around the chip module (see Thomas Grasl et al. Fig 3; 6).

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6. Regarding claim 31, Thomas Grasl et al. discloses;

The contacts of the chip module or of the antenna have points (see Thomas Grasl et al. Fig 3; 5) so that when pressed against the other contacts they penetrate the other contacts (see Thomas Grasl et al. Fig 3; 3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Grasl et al., DE 10205914 , in view of Kappel et al., US 2003/0229985.

9. Regarding claim 32, Thomas Grasl et al. does not disclose;

The pointed contacts are of pyramidal shape.

However Kappel et al. teaches

The pointed contacts are of pyramidal shape (see Kappel et al. Fig 8; 120).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing pyramidal shape contacts, as taught by Kappel et al., since such a modification would provide more conductivity.

10. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Grasl et al., DE 10205914 , in view of Kappel et al., US 2003/0229985, as applied to claim 32 above, and further in view of Estes et al., US 6,189,208.

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11. Regarding claim 33, Thomas Grasl et al. in view of Kappel et al. does not disclose;

Each pointed contact is formed by a multiplicity of particles.

However Estes et al. teaches

Each pointed contact is formed by a multiplicity of particles (see Estes et al. column 5; line 5-16).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. in view of Kappel et al. by providing multiple particles for the pyramidal shape contacts, as taught by Estes et al., since such a modification would be provide more hardness.

12. Regarding claim 34, Thomas Grasl et al. in view of Kappel et al. does not disclose;

The particles are nickel-coated diamond particles.

However Estes et al. teaches

The particles are nickel-coated diamond particles (see Estes et al. column 5; line 17-19).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. in view of Kappel et al. by providing diamond particles for the pyramidal shape contacts, as taught by Estes et al., since such a modification would be provide more hardness.

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13. Claims 35-36, 41-43 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Grasl et al., DE 10205914, in view of Chung, US 6,886,246.

14. Regarding claim 35, Thomas Grasl et al. does not disclose;

The module film is an elongated strip carrying a plurality of the module chips and their respective module contacts at a uniform predetermined module spacing, the method further comprising the step of:

longitudinally subdividing the strip into film sections each of which is of a length equal to the predetermined module spacing.

However Chung teaches

The module film is an elongated strip (see Chung Fig 3; 220) carrying a plurality of the module chips (see Chung Fig 3; 212) and their respective module contacts (see Chung Fig 3; 218) at a uniform predetermined module spacing, the method further comprising the step of:

longitudinally subdividing the strip into film sections (see Chung Fig 3; 222) each of which is of a length equal to the predetermined module spacing.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing panel with plurality of electronics substrate, as taught by Chung., since such a modification would be provide continuous production.

15. Regarding claim 36, Thomas Grasl et al. discloses;

The support (see Thomas Grasl et al. Fig 3; 6) to whose face the antenna and antenna contacts (see Thomas Grasl et al. Fig 3; 3) are secured is a surface of packaging (see Thomas Grasl et al. Fig 3; 6,5).

16. Regarding claim 38, Thomas Grasl et al. does not disclose;

The longitudinal subdivision of the strip carrying the modules is carried out before pressing the film sections against the respective antenna on its strip.

However Chung teaches

The longitudinal subdivision of the strip (see Chung Fig 3; 222, 220) carrying the modules (see Chung Fig 3; 224) is carried out before pressing the film sections against the respective antenna on its strip.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing panel with plurality of electronics substrate , as taught by Chung., since such a modification would be provide continuous production.

17. Regarding claim 41, Thomas Grasl et al. does not disclose;

Coating the antenna strip with adhesive prior to pressing the module strip against the antenna strip.

However Chung teaches

Coating the antenna strip with adhesive (see Chung Fig 17; 424) prior to pressing the module strip (see Chung Fig 17; 402) against the antenna strip (see Chung Fig 17; 420).

It would have been obvious to one with ordinary skill in the art at the time of

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invention to modify Thomas Grasl et al. by providing adhesive strip , as taught by Chung., since such a modification would be provide continuous production.

18. Regarding claim 42, Thomas Grasl et al. does not disclose;

The coating with adhesive is only done to discrete regions of the antenna strip adjacent the antenna contacts.

However Chung teaches

The coating with adhesive (see Chung Fig 12; 406) is only done to discrete regions of the antenna strip (see Chung Fig 12; 404) adjacent the antenna contacts.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing adhesive pattern , as taught by Chung., since such a modification would be provide continuous production.

19. Regarding claim 43, Thomas Grasl et al. does not disclose;

The discrete regions have a size generally corresponding to the module spacing.

However Chung teaches

The discrete regions have a size generally corresponding to the module spacing (see Chung Fig 12; 406) .

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing adhesive pattern , as taught by Chung., since such a modification would be provide continuous production.

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20. Regarding claim 51, Thomas Grasl et al. discloses;

The module (see Thomas Grasl et al. Fig 3; 4) is associated with two respective module contacts (see Thomas Grasl et al. Fig 3; 5) and the module is secured to the film (see Thomas Grasl et al. Fig 3; 1) between the two respective contacts (see Thomas Grasl et al. Fig 3; 6,5,4,1).

21. Regarding claim 52, Thomas Grasl et al. does not disclose;

The module film is flexible and of plastic.

However Chung teaches

The module film is flexible and of plastic (see Chung Fig 3; 220 and column 5; line 14-18) .

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by providing plastic substrate , as taught by Chung., since such a modification would be provide continuous production.

22. Claims 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Grasl et al., DE 10205914 , in view of Chung , US 6,886,246, as applied to claims 35-36,41-43 and 51-52, and further in view of Okamoto et al., US 2004/0253818.

23. Regarding claim 46, Thomas Grasl et al. together with Chung. do not disclose;

Rolling up the antenna strip after pressing the module film against the antenna strip forming the support.

However Okamoto et al. teaches

Rolling up the antenna strip (see Okamoto et al. Fig 18; 25) after pressing

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the module film (see Okamoto et al. Fig 15; 5) against the antenna strip (see Okamoto et al. Fig 15; 3) forming the support.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. in view of Chung by providing roll , as taught by Okamoto et al., since such a modification would be provide continuous production.

24. Regarding claim 47, Thomas Grasl et al. together with Chung. do not disclose;

Prior to rolling up the antenna strip of inspecting the modules.

However Okamoto et al. teaches

Prior to rolling up the antenna strip of inspecting (see Okamoto et al. Fig 18; 42) the modules.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. in view of Chung by inspection step, as taught by Okamoto et al., since such a modification would be provide continuous production.

25. Regarding claim 48, Thomas Grasl et al. together with Chung. do not disclose;

After inspecting the modules of marking any modules failing inspection.

However Okamoto et al. teaches

After inspecting the modules of marking (see Okamoto et al. Fig 18; 45,47) any modules failing inspection.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify Thomas Grasl et al. by inspection marking step , as taught by Okamoto et al., since such a modification would be provide continuous production.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZM PARVEZ whose telephone number is (571)270-1391. The examiner can normally be reached on 8:30-5:30/ Alt Fri day off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DERRIS BANKS can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AZM PARVEZ
Examiner
Art Unit 3729

/Derris H Banks/

Supervisory Patent Examiner, Art Unit 3729

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